

REMARKS

This Amendment and Response to Non-Final Office Action is being submitted in response to the non-final Office Action mailed February 13, 2007. Claims 1-35 are pending in the Application (Claims 7-19, 21-31, and 34 being withdrawn from consideration). Claims 1-6, 20, 32, 33, and 35 are rejected.

Specifically, Claims 1-5, 20, 32, 33, and 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Amatucci et al. (US 6,467,761). Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Amatucci et al. (US 6,467,761) in view of Applicants' Admitted Prior Art (AAPA).

Claims 2-6 and 20 are objected to for containing various informalities.

In response to these rejections and objections, Claims 1-3 and 32 have been amended to clarify the subject matter which Applicants regard as the invention. These amendments are fully supported in the Specification, Drawings, and Claims of the Application and no new matter has been added. In view of these amendments and the following remarks, Applicants submit that the Application is now in condition for allowance and respectfully request such action.

Objection to Claims 2-6 and 20:

Claims 2-6 and 20 are objected to for containing various informalities.

Specifically, Examiner objects to the recitation of "each of" prior to "at least one lever" in Claims 2 and 3, as there is only "at least one lever."

In response to this objection, the recitation of "each of" prior to "at least one lever" has been removed from Claims 2 and 3.

Therefore, Applicants submit that the objection to Claims 2-6 and 20 for containing various informalities has now been overcome and respectfully request that this objection be withdrawn.

Rejection of Claims 1-5, 20, 32, 33, and 35 Under 35 U.S.C. 102(e) - Amatuucci et al.:

Claims 1-5, 20, 32, 33, and 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Amatuucci et al. (US 6,467,761).

In response to this rejection, Applicants submit that the novelty of the present invention is that, as previously recited in independent Claims 1 and 32, the primary floating actuator device utilized is “coupled between the at least one lever and the platform.” In other words, the primary floating actuator device is directly coupled to or disposed “on-board” the target platform on one side, without an intervening lever, and coupled to a lever on the other side. Importantly, no floating actuator device utilized is directly coupled to the fixed frame. The Amatuucci et al. reference, on the other hand, discloses floating actuator devices that are universally coupled to the target platform through an intervening lever (see FIGS. 1-3 (110, 210, and 212), 5 (501a - c), 6 (602), 16 (1601a - d), and 17). The Amatuucci et al. reference also discloses floating actuator devices that are directly coupled to, and directly constrained by, the fixed frame (see FIGS. 1-3 (110 and 212), 5 (501c), 6 (602), 16 (1601c and d), and 17).

This is disadvantageous, as specifically described in the Background of the Present Invention of the Application with regard to the Amatuucci et al. reference, because “the platform’s width is dependent upon the length of the arms, and the platform size is effectively large for a high lever ratio. Moreover, the platform footprint cannot be any less than the combined length of the symmetrical lever arms. Consequently, a large platform with large lever ratios will result in a low natural frequency of the system.” (See paragraph [0009]). Thus, the novel configuration of the present invention allows for smaller platform size and greater platform movement speed.

The novel differences between the Amatucci et al. reference and the present invention are now made clear in amended independent Claims 1 and 32, all description and figures of the Amatucci et al. reference disclosing a floating actuator device that is substantially directly constrained by the fixed frame. Independent Claims 1 and 32 have been amended to recite:

1. (currently amended): A small-scale positioning device comprising:

a fixed frame;

a platform, movably attached to the fixed frame via at least one lever; and

a floating actuator device, coupled between the at least one lever and the platform, that when activated generates a force on the platform and an equal but opposite force on the at least one lever, thereby controlling the position of the movable platform relative to the fixed frame;

wherein all floating actuator devices utilized are substantially free from direct constraint by the fixed frame.

32. (currently amended): A method of positioning a platform relative to a fixed frame in a small-scale positioning device, comprising:

providing a small-scale positioning device having a fixed frame, a platform that is movably attached to the fixed frame via at least one lever, and a floating actuator device, coupled between the at least one lever and the platform;

activating the floating actuator device; and

upon activating the floating actuator device, applying a force on the platform and an equal but opposite force on the at least one lever, thereby controlling the position of the movable platform relative to the fixed frame;

wherein all floating actuator devices utilized are substantially free from direct constraint by the fixed frame.

These amendments are fully supported at paragraph [0034] of the Specification which provides “[t]he actuator device 25 may be said to be “floating” in that it is not constrained to the fixed frame 11, but only to the platform 12 and the levers 13,14.”

Therefore, Applicants submit that the rejection of Claims 1-5, 20, 32, 33, and 35 under 35 U.S.C. 102(e) as being anticipated by Amatucci et al. (US 6,467,761) has now been overcome and respectfully request that this rejection be withdrawn.

Rejection of Claim 6 Under 35 U.S.C. 103(a) - Amatucci et al. and Applicants’ Admitted Prior Art:

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Amatucci et al. (US 6,467,761) in view of Applicants’ Admitted Prior Art (AAPA).

The above arguments apply with equal force here.

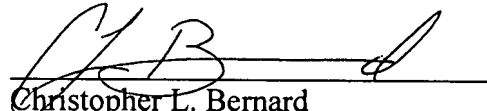
Therefore, Applicants submit that the rejection of Claim 6 under 35 U.S.C. 103(a) as being unpatentable over Amatucci et al. (US 6,467,761) in view of Applicants’ Admitted Prior Art (AAPA) has now been overcome and respectfully request that this rejection be withdrawn.

CONCLUSION

Applicants would like to thank Examiner for the attention and consideration accorded the present Application. Should Examiner determine that any further action is necessary to place the Application in condition for allowance, Examiner is encouraged to contact undersigned Counsel at the telephone number, facsimile number, address, or email address provided below. It is not believed that any fees for additional claims, extensions of time, or the like are required beyond those that may otherwise be indicated in the documents accompanying this paper. However, if such additional fees are required, Examiner is encouraged to notify undersigned Counsel at Examiner's earliest convenience.

Respectfully submitted,

Date: May 14, 2007



Christopher L. Bernard
Attorney for Applicants
Registration No.: 48,234

CLEMENTS | WALKER
1901 Roxborough Road, Suite 300
Charlotte, North Carolina 28211 USA
Telephone: 704.366.6642
Facsimile: 704.366.9744
cbernard@worldpatents.com